MUNICIPAL TRANSPORATION PROJECT PRACTICABLE ALTERNATIVES ANALYSIS FOR PROJECTS THAT AFFECT WETLANDS

The applicant is responsible for preparing a Practicable Alternatives Analysis (PAA) that documents a thorough evaluation of alternatives considered to avoid and minimize wetland impacts. It is very important to provide as much supporting information and detail as possible on the range of alternatives considered, as your information is used by WDNR Permit Review Staff and U.S. Army Corps of Engineers (ACOE) permit review staff to verify the project meets the requirements established in state and federal law.

Note: The ACOE typically regulates more waters than just wetlands, including ponds, lakes, rivers and streams. It is recommended that applicants demonstrate in the application materials how the proposed project impacting these resources has been designed to avoid and minimize impacts to these aquatic resources.

DIRECTIONS: All questions below must be answered in detail and supported with documentation. Attach your PAA to your permit application along with the other informational items required for a complete application package.

ASSISTANCE: If you have questions about this PAA outline please contact the WDNR Transportation Liaison or the US Army Corps of Engineers project manager for the county where your project is located for assistance.

1. PROJECT BACKGROUND

A. Describe the basic purpose and need for the project.

- **Background – Purpose and Need (Check all that apply)**

Deteriorated Road		Deteriorated Structure	
Flooding problems on the road		Emergency structure replacement	
Safety Problems			
Widening to accommodate traffic increase		Other (Please identify):	

B. Describe the proposed project.

- **Is the proposed project (Check all that apply)**

New construction on a new alignment	
Expansion of an existing roadway, such as adding turn lanes, widening existing lanes, or adding new through lanes	
Reconfiguring the existing road by altering sidewalks, widening side slopes, or other changes	
New bridge, arch or culvert	

- **Developing Project Alternatives -** You must consider and describe avoid and minimize project alternatives that may be unique to your proposed project and/or site.

- **For expansions or road upgrades:** How could you redesign or reduce your project to ***avoid*** *and* ***minimize*** wetlands and still meet your basic project purpose? *Examples may include reduce the width or height of the road and/or structure, reduce the side slopes of the road, no sidewalks or alter the location of the terrace, choose a more appropriate stream structure type, direct heavy traffic to alternate road, relocate road / wetland intersection in the narrowest part or edge of wetland, shift alignment to avoid high quality wetlands.*
- **For new roads:** What other transportation corridors were considered for this project? *Corridors that meet the purpose and need should be considered further, particularly if they result in lower wetland impact compared to the selected alternative. If no other sites were considered, please explain why.*

C. Explain what the consequences are of not building the project. Include social and economic consequences, as well as other pertinent information.

2. EVALUATING THE PROJECT ALTERNATIVES

Providing summary tables of the alternatives considered can provide a useful comparison of the alternatives. Each project alternative should be clearly labeled on an aerial photograph showing proposed

location and wetland and waterway boundaries. In a narrative or a table provide information to answer the following questions for each alternative considered:

A. Will the alternative affect wetlands? If so please provide the acreage and type of wetland affected.

B. What are the primary costs for designing and constructing the alternative?

C. What are the reasons that alternative is not practicable?

- *Logistical constraints such as: inability to meet other regulatory standards, construction limitations, access or transportation concerns, public safety issues, or site availability*
- *Technical constraints such as: inadequate depth to bedrock, inappropriate site geology, inadequate distance to groundwater, proximity to a contaminated area, unfavorable soils, or engineering concerns.*
- *Impacts to other important natural resources such as: Archeological or historical sites, habitat for Threatened or Endangered species, environmental corridors or natural areas, or other waterways*

D. Are there other factors you would like us to consider during our alternative analysis evaluation?

Project Alternatives Evaluation - Example of table:

Alterative #	Description of alternative	Wetland Impacts / Wetland Type	Cost of the alternative	Minimization techniques applied to this alternative	Reasons this alternative is NOT practicable						Indicate with a ✓ if this is the preferred alternative
					Inability to meet regulatory standards	Construction limitations	Access or transportation concerns	Public safety issues	Engineering concerns	Other – Please describe	
Example #0	*Alignment of road to the south*	*0.02 / wet meadow*	*$40,000*	*Avoids high quality sedge meadow, reduced the slopes of the road to 3:1*				✓			✓

3. PREFERRED PROJECT ALTERNATIVE

A. Summarize why the project must be located in or across wetlands, how your preferred project alternative meets the basic project purpose and how it avoids and minimizes wetland impacts.

B. Detail how you plan to minimize harm to wetlands. Examples include, but are not limited to, erosion control and stormwater best management practices, clear marking of the limits of proposed wetland impact, and visible flagging for protection of adjacent or nearby wetlands.